sterilized nail-brush for the surgeon's hands. The surgeon will send instruments, sponges, sutures, and anæsthetics.

Next month I will speak about sterilizing the towels, water, etc., and the final preparations required before the arrival of the surgeon.

(To be continued.)

OBSERVATIONS ON HOSPITAL ORGANIZATION *

By GEORGE H. M. ROWE, M.D.
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Edward Everett Hale has said, "'*Together* is the great, central word of modern civilization." We have come together, a set of busy workers, bearing the burden and heat of the day, hoping that our togetherness may solve some of our difficulties, give us fresh courage, and help us to shove forward the great humanitarian work of hospitals, which, like the Nilometer, shows the high-water mark of civilization.

At the outset let me say frankly that I offer nothing novel or ideal, and have no panacea for the vexations that besiege us.

I do not present a formal elaboration of hospital organization, but only some observations on the cardinal principles underlying the average general hospital, now found in every American city. The most I can hope to do is to make practical suggestions for obviating certain dangers which threaten the well-being of unfortunate or illy-developed organizations.

The hospital is a costly, complex mechanism, and its perfection depends on the nicety of the adaptation of the different parts, "from big wheel to cog-pin," each having relation to all, and working together for the ultimate object,—the recovery of the sick.

In treating of hospital organizations, many different systems obtain, according to the locality, creed, period when begun, the relations of medical schools and medical teaching, the source of income, whether private, State, or municipal, well funded, or dependent upon voluntary contributions. Despite these varying conditions, the problem now confronting hospital experts is to find out the best system which has stood the test of experience, and, *if possible,* work out a formula for putting all hospitals on the same fundamental principles. To this end, I take it, is the meaning of this symposium.

The impulse or genesis of a hospital often influences the direction

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of affairs, decides the kind or quality of the management, and brings the inevitable consequences, be they good or bad. The reaping always results from the sowing. The management of a hospital in a small community too often is made up, not with reference to the real requirements of experience and ability, but because the persons represent money, and money only, or because they "go to our church," or some other "most lame and impotent conclusion." The hospital supported or aided by a State or municipality is often compromised by the power of party politics.

Privately endowed hospitals sometimes have managers appointed by donors of the fund, who, though good personal counsellors and eminently respectable, are not judicious directors for the peculiar work demanded in wisely conducting a hospital.

Trustees often start with faulty organization, sometimes degenerate into traditions and ruts, and often are "behind the procession." Occasionally, alas! they are fifty-dollar men struggling with a ten-thousand-dollar job. Thus it comes about that we have hospitals all over our wide land with varying organizations and customs, hardly two run upon exactly the same lines.

Probably you will all agree with me that the central controlling power and the ultimate responsibility for the hospital rests with the governing body, whether under the name of trustees, managers, governors, or what not. While there may be a corporation or appointing power, as in the State and city institutions, it yet remains that the governors should always be the final and absolute authority, shaping the policy, regulating the affairs, and held responsible for the results.

Obviously, the composition of the governing board determines the efficiency and general character of the hospital work. Large boards, as a rule, are too cumbersome, not easily harmonized, and tend to contentions of policy or factions. Largeness of number does not always mean forcefulness. Is it not true that in most boards three or four men guide the general policy, whether for steady progress along the lines of constantly advancing medical science, or, perchance, for conservative objections and the fetich of precedent? Nothing is more deadening than the plea, "We always have done so."

It may seem that we are not overmuch reverential in discussing managing boards, whose creatures we are and to whose power we owe our present positions, but we are now among ourselves to talk frankly of the things that interest us and are vital to the whole hospital system. However, hospital managers, taken as a whole, analyzing them as we would the board of a large railroad, manufactory, or bank, are as fine a body of men as can be found. They are largely men who are earnest

and public-spirited, willing to give gratuitously much valuable time directly or indirectly, zealous to gain a high reputation for their hospitals, and imbued with the true sense of official responsibility. I gladly bear witness to a personal knowledge of many such gentlemen, who would stand any test for integrity and fidelity to their trusts. This is attested by the fact that hospitals are rapidly increasing and their character and efficiency steadily improving.

In a somewhat extended hospital experience I have been asked many times, "Do you believe in having physicians on the board of managers?" If we should refer this question to the medical staff of some well-known hospitals, we should be quickly advised that the majority of the managers ought to be medical men; if, forsooth, the staff runs a hospital, why should they not be managers in name? Much has been written by physicians in support of this view.

The average medical man is an educated gentleman, a delightful companion, a man of parts, and many such are our best friends; but doctors, when associated in corporate matters, are oftentimes too self-seeking. With an eye out for their own profession, they are inclined to be aggressive, and, naturally, under such conditions are not a gracious, peaceful, easily coöperative body of men. This professional enthusiasm is apt to obscure an all-around view of hospital government. Someone has said that "a crank is one who sees a thing clearly, but never sees it in its relations."

A large hospital, on one side, is a business enterprise, demanding large expenditures and requiring that large business training which a physician seldom gets. The faculty so often wanting is the power to grasp untried and perplexing questions, and then, as Matthew Arnold said, "Think straight and see clear." These weighty decisions can be best entrusted to a man who has had large experience in adjudicating entanglements of his own, be he wool merchant, leather merchant, bank president, or in any other calling demanding an analytic and wide business training. Special advisers in matters of medicine or technical work can readily be had whose attitude is unprejudiced, leaving the trustee without any professional bias free to arrive at his own conclusions. These remarks do not refer to or include the medical representative of required experience, occasionally found on hospital boards, but to physicians collectively.

The trustees should choose the executive officer and control the appointment of other officers. Naturally, an unpaid board of busy men in a large hospital must rely on the superintendent to investigate the fitness of applicants for positions, even depending upon him to nominate the more important ones, such as assistant superintendent, matron,

superintendent of training-school, steward, engineer, etc., and leaving him to fill minor positions, without referring to them; he, in turn, relying on heads of departments to secure good workers, subject to his approval. But even this system of delegated authority rests on the fundamental principle that there is no person serving in any capacity who does not derive authority ultimately from the trustees, to whom he or she is responsible. For want of this régime the responsibility for unfortunate occurrences has been placed upon the visiting staff, or the training-school management, or some person not a creation of the managers. Recently the writer was consulted by an Executive Committee of the trustees of a largely endowed hospital as to whether the faculty of a medical school might not be unrestrictedly given full appointing powers for all the medical and surgical staff of their new hospital. Strangely enough, this inexperienced Executive Committee leaned strongly to the view that this would be a judicious procedure.

It seems a reasonably fair proposition to allow the visiting staff to suggest or officially nominate for staff vacancies. In the long run such a method will probably strengthen the staff, provided its members do not subserve the best interests of the hospital to their affiliations with a medical college or to personal and family motives. The trustees should retain the power to elect good nominations, or, for sufficient reason, to reject them if unwise.

One of the vital points of hospital management is the relation of the superintendent to his managers. This varies very much in different hospitals. Sometimes from severity of policy, or views as to fitness of things, a somewhat sharp line of demarcation is drawn in official relations. For instance, some governing boards seem to think that the presence of the superintendent at a board meeting is an admission of equality, or that matters might be discussed which he should not know; or, if at times he were admitted, it might be viewed as an indulgence. Other boards require the superintendent's presence, and sometimes he is, *ex-officio,* the clerk of the board. Personally, I believe that the presence of a superintendent at a board meeting helps decidedly to a mutual understanding of the business and of the relation of things. It often saves blunders on the part of both, clears up mistaken ideas, removes wrong impressions, cements unity of sentiment, and makes coöperation easier and more efficient.

If the superintendent is inexperienced, so much the more does he need to be educated and given a broader comprehension of his work. In this, as in everything, the superintendent should be loyal in spirit, discreet of tongue, and confidential as to debates or reason for action. A superintendent may blunder, may be mistaken in judgment, but should

never fail to give to his superior officials the same devotion and loyalty which he expects from his subordinates. His attitude should always be that of helpfulness and suggestion. His intimate and personal knowledge of the actual workings can often make plain the situation when the trustees otherwise are quite in the dark.

The trustees should, *in their turn,* loyally support the superintendent, especially in the discipline of the house. Disaffected employés who complain or resent dismissal for cause should be made to feel that their appeals are in the nature of an impertinence. Trustees should listen to accusations of patients as to neglect or ill-treatment, but should reserve judgment until they hear the other side, giving the superintendent time to thoroughly investigate the charges and report. Even if disapproval were his final fate in the matter, the fact should be withheld from the hospital household lest advantage be taken of his mistakes.

While the superintendent as executive officer is subordinate, this need not prevent him from, may I say, educating his trustees. Many a hospital problem requires analysis of all the conditions bearing upon the case. Many boards happily desire and rely upon his presence as a help in dispatching business. As a practical man of experience and wide observation of hospital work, a superintendent may save a board from repeating experiments that have failed elsewhere and prevent the misapplying of energy and money. I once asked a superintendent, "What are you doing nowadays that's new?" He replied, "Nothing much; only educating my new trustees."

The personal equation enters into this problem and often settles the relations between the superintendent and his board. The more they recognize his sound sense, his mastery of the conditions, his ability to cope with difficulties, the more they consciously or unconsciously fall into the habit of accepting his point of view. Here, as everywhere, power gives personal ascendency.

A board of trustees cannot promote the interests of its own hospital without keeping in touch with the progress of other hospitals. I am glad to say that twice within ten years my own trustees, in my company, have visited New York at their own personal expense. Once every trustee devoted two days to the study of New York hospitals, and one remained a third day. On three or four other occasions single members have visited New York, Philadelphia, Baltimore, and other cities. These inspections have always given an impetus to our own hospital affairs. This is in marked contrast to another hospital where a superintendent, a member of this association, told me that "Our managers never come to the hospital. Everything is left for me to manage." Unhappy man! I therefore offer the suggestion that in the education of your trustees

you can in no way obtain better results than by inducing them to visit other hospitals.

By virtue of the power vested in him, the superintendent should be the head of the hospital family, as the executive right hand of the trustees, and responsible to them only. He should take charge of the general management of all the affairs of the hospital except the professional care of the patients and matters intimately connected therewith. He should select the officers, employés, and servants of every grade, and likewise dismiss those who are unfaithful or incompetent or whose presence is prejudicial, subject, of course, to the approval of the trustees. He should make minor rules for the internal government and cause the same to be executed. His aim should be to adjust the multifarious and complicated relations, so as to bring harmony into everything, correlating all the forces to the well-being of the sick.

If the superintendent is a medical man, he should also serve as a resident physician. Such an officer has great advantage in working out the various problems so frequently presented to the executive. It gives him greater scope and power in many dilemmas that must be quickly settled. The staff recognizes him as an equal, and not as a layman. He has better control of his house staff, understands better the things affecting ward management and nursing. No doctor, however, can rely on his medical degree as a guarantee of executive ability and administrative power, without which no man can become a successful superintendent. Seldom are the two conspicuously combined in one man. Sir Henry Burdett, himself a layman, in his ponderous history of "The Hospitals and Asylums of the World" says: "Our experience leads us to conclude that, *provided the board of managers is efficient,* it does not materially matter whether the chief authority be a medical man or a layman, always providing that the gentleman appointed is specially qualified to discharge the duties entrusted to him."

Experience has made me a believer in what is called the military plan of household government. Twenty years or more ago this régime was not in favor. Many a hospital and asylum has been rent in twain by the dual system, one man being nominally superintendent and the other the steward.

With the trustees as the governing board, with the superintendent as their executive officer (in all matters outside the professional care of the sick), the departments should radiate in direct lines from the executive in such a manner that no two subordinate officers or employés can conflict with each other without the jurisdiction of the superintendent to settle the difficulty. This I consider a most important principle. To illustrate: There is probably no superintendent of any experience

here who has not seen somewhere that old-time ulcer on hospital management, the everlasting, "ding-dong," "never-let-go" quarrel between the superintendent of nurses and the housekeeper. Each of these functionaries was independent of, and not responsible to, the other, but both were responsible to the executive. Much of his valuable time was wasted in the endeavor to amicably adjust the ever-occurring frictions and real or imaginary clashings of authority. In the division of authority, when the chief woman is superintendent of nurses *and* matron, having assistant superintendents of nurses for the nursing service and assistant matrons for the domestic affairs, nearly all the old-time friction among the "women folks" at once disappears.

It is difficult in a large hospital to schedule the officers and service so that the whole work will be carried on properly without friction. But it is possible to have a proper alignment of officers judiciously selected, well-defined divisions of work, and explicit regulations for the conduct of each general line of work, written, framed under glass, and never allowed to disappear by the agency of Pagan housecleaners;—all this may not be the "promised land," but it will "make the desert blossom like the rose."

Every grade of work should be a distinct, special, subordinate branch of some department. Most hospitals endeavor to pursue this general method, or are supposed to do so. In smaller ones it is easier to arrange, as the number of elements are fewer. But in a large general hospital, like the Boston City Hospital, having subordinate departments scattered in three sections of the city, having on its pay-rolls four hundred and eighty-five persons, with forty-six house officers, one hundred and forty-six nurses, and a family of twelve hundred and fifty persons, it becomes most imperative to adjust the regulations so that the same general methods of management shall run through all subordinate divisions, all being rational and interrelated parts of a unified whole.

The visiting staff, medical and surgical staff—by whatever name called—is one of the most distinguished elements in the hospital entity. As we all know, the staff has one of the most important and indispensable functions of hospital work. Indeed, it carries out the work for which all hospitals are created, namely, the curing of the sick. The physician or surgeon, particularly the latter, is justified in being a "Czar" in regard to the technique and details necessary to work out his special views for treating each patient. It should be the duty and ambition of the executive to coöperate in this professional work, but without abrogating the established code of rules made for the general good. But the superintendent often finds himself steering between Scylla and Charybdis. In struggling to avoid a failure to meet the requirements

of the staff he falls into the danger of over-expenditure. With a liberal appropriation the demand for multitudinous paraphernalia can be met, but with an inadequate allowance it is well-nigh impossible.

Unfortunately, the visiting staff sometimes fails to conscientiously restrict its duties to the treatment of patients. By habit of mind, by his very zeal in struggling for perfection in his craft, the physician or surgeon sometimes makes raids outside of his jurisdiction. He forgets his distinct professional function and its relation to other sides of the hospital work and takes action or gives orders outside his province, trenching on formulated rules or common custom.

The staff should not attempt to join in the general administration of the hospital, or, shall I say, interfere with the government, which belongs to the managers through the executive officer. A discreet, fair-minded physician or surgeon generally recognizes this distinction of work. It is the want of this recognition which so often makes the trouble which necessarily follows, causing the superintendent anxious hours. The function of the visiting staff is to prescribe, to direct, to operate. It devolves upon the executive to help in this by what he considers the best method of accomplishing it, being responsible in his work to his board of managers, whose officer he is, and not to the staff, whose officer or servant he is not.

The house staff, under whatever name it may be called, is a very important factor in the well-being of a general hospital and deserves special notice. Their function is well known,—to assist the visiting staff in carrying out their orders, arranging numerous details for the observation, care, and treatment of patients, investigation of the clinical course of cases, and laboratory work in blood, urine, sputum, and other clinical features. Their work is certainly laborious under modern scientific methods. They are medical assistants not only, but members of the hospital family. Their conduct is important in the hospital entourage, tending either to elevate the standard, which reacts on the whole body of workers, or to lower it to the level of the Parisian Hôtel Dieu. Caring only to absorb whatever may be of future professional value, they sometimes degenerate into the free-and-easy manner of Bob Sawyer. The well-being of an institution aggregating many people rests upon an ethical basis, just as society does.

In my own hospital I have seen a long procession of more than four hundred young men come and go with varying well-being to themselves and their hospital. Twenty or more years ago the standard was very far below the present one. An observing member of the visiting staff once said to me, " But you must remember that they are a *peculiar*

people." The genuine enjoyment of the individuality of this peculiar people depends somewhat on the point of view.

Formerly the incoming house officer was oftentimes a paradox; apparently absurd, yet true; unknown, yet very well known; holding opinions at variance with common sense, and yet when investigated appearing well founded. He came to the hospital an educated young man, yet he came to be educated; he came to learn, yet he "knew it all;" he yearned to find out the truth about medical science, but he "never made a mistake." He was neither butterfly, cocoon, nor spun silk; he was "*sui generis.*" The position of house officer means more to-day than twenty years ago. There is a larger number from which to select. They come to their work later, better educated, partly by the advances in medical teaching, and because hospital appointments are more prized and less easy to get or hold.

May I present practical illustrations of the advancement in methods of choice and holding to better standards of work and conduct at the Boston City Hospital? Twenty years ago the test by a somewhat crude examination was much lower than is now required. The examination passed and nomination by the staff secured, the candidate considered himself as good as graduated, because, no matter what his work or conduct, somehow, "by hook or by crook," he believed he would pull through. The applicant now comes to an examination fully one and one-half years later in his studies than formerly. The examination is more strict and more varied. He is first sharply examined to see if he is worth considering at all. Passing this, he is examined for any service he may wish to enter. If he passes this, he must undergo an investigation by reports from those under whom he has worked in any clinic or hospital. He is marked on his education, as shown in his written examination, and upon his personal appearance and general fitness. If finally nominated to the trustees, he is in turn investigated by them, but not in the perfunctory manner with which managers are usually credited.

When finally appointed, it is only for six months as externe in a two-years' course. At the end of six months a report is obtained from every member of the staff under whom he has worked upon such details as punctuality, faithfulness, sense of responsibility, manner to superiors and to inferiors, interest in his work, etc. The report asks of each member of the staff, "Do you recommend his promotion?" If these replies are favorable, he is recommended for promotion for six months as junior interne. If, upon investigation by the trustees, he is deemed worthy of promotion, he receives it. Every six months each promotion of every house officer results in like manner, and when his four terms

of six months each are finished the staff is again asked, "Do you recommend that he receive a diploma?" Under this system house officers are not infrequently dropped from the hospital roster in all stages of their course, and diplomas have occasionally been withheld at the last moment, for several months after they have finished their full course, for newly discovered conduct unbecoming a house officer or a gentleman.

I have developed this point of hospital organization at some length to show the improvement over former methods. House officers often are a great trial to a superintendent, a menace in many instances to the good name of the hospital, and oftentimes the real source of complaint on the part of the public, and in some cases the cause of scandal. I gladly bear witness that this method of selection and holding under control has reduced discipline to a minimum. It has been an incentive to better work, finer conduct, and has held in check the extreme individualism so often found in young men. It aids, also, in their personal development, helping them to subdue themselves.

No severer ordeal can be sustained by a young man than being a house physician or surgeon in a large hospital. What he gains, he gains by sheer force of character. If he does well his part, it means work of the hardest sort, physical and mental. All honor to those who have worked out their own career, and brought betterment and good repute to themselves and their hospital.

The training-school for nurses demands a brief word. Thirty years ago a training-school for nurses was a special corporation engrafted upon the hospital, having an organization of its own, and doing the nursing work in the hospital under contract. The school was not an integral part of the hospital, and hence was never under the authority of the managers beyond so much nursing work for so much pay. None of us regrets such an arrangement for a beginning, because otherwise the present more perfected training-schools would probably have been delayed many years. Now that training-school methods are so widely and favorably recognized, it would seem wiser to include it in the general management. It has seemed expedient in a few municipal hospitals, subject to the tergiversations of party politics, to retain the old system in order to preserve the integrity of the school and save giving it over to political bosses. A system of unity saves much friction, increases the usefulness, and solidifies the hospital combination. A few hospitals having schools of recent creation have placed the management of the school under a separate head, responsible to the trustees, but outside the jurisdiction of the superintendent. Is not such a system illogical, unbusinesslike, conducive to friction, shifting the various responsibilities, subversive of the best discipline, and tending to disrupt the household

family? Sometimes the result is "open war," unless, perchance, the *two* heads of *two* branches of *one* organization possess the souls of saints and the forbearance of Job. The unal arrangement conduces to harmony and unity of action and control, as the two departments cannot avoid coming into contact and overlapping their lines of duty.

Yet after all that can be said, when we come to the vital point of hospital organization and management, whether the executive be strong or weak, whether the staff is distinguished or mediocre, whether the funds are ample or barely sufficient for producing fair results, the ranking of a hospital amongst its kind and class depends upon the character, efficiency, and determination of its managing board more than on any one thing, just as the success of any corporation depends on its directors. Do we, my friends, unduly magnify our office if we modestly assert that the best of boards would avail little unless it has a superintendent wise enough, strong enough, and faithful enough to execute, to uphold, and to bring their plans to full fruition, so that the hospital shall not fail in accomplishing what the community has a right to expect of it?

There is much cause for congratulation in the perfection already attained. The advance since the close of the Civil War has indeed been remarkable, and hospitals have been in the vanguard of humanitarian movements in America. Civic hospitals have increased more rapidly than in any other civilized nation during this period. Hospital construction in the United States has been a marvel to other countries and has set the standard, which even Paris is now endeavoring to attain, using the money donated by an American, resident in Paris, with whom as a boy I sat upon the benches of a famous New Hampshire academy. Science has revolutionized medicine and surgery. Nursing seems to-day almost a newly created art. Money is being poured out more generously than ever before, not only for construction and maintenance, but also in more reasonable remuneration for hospital workers. Let us not forget that the chief value of a *present* is to get a better *future* out of it.

In conclusion: A prominent professor at Harvard, on hearing statements about modern achievement, usually reiterated, "That is what Plato said two thousand years ago," and then quoted Plato's original thought. In forecasting the ideal hospital of the future, may I quote from a book written in Latin in 1516, Sir Thomas More's "Ideal City"? Surely "there is nothing new under the sun," for Sir Thomas More said (translation written by Richardson in 1560):

"But first and chiefly of all, respect is had to the sick that be cured in the hospitals. For in the circuit of the city, a little without the walls, they have four hospitals, so big, so wide, so ample and so large, that they may seem four little towns, which were devised of that bigness

partly to the intent that the sick, be they never so many in number, should not lie too throng or too straight, and therefore uneasily and incommodiously; and partly that they which were taken and holden with contagious diseases, such as be wont by infection to creep from one to another, might be laid apart, far from the company of the residue. These hospitals be so well appointed, with all things necessary to health, so furnished, and moreover so diligent attendance through the continual presence of cunning physicians is given, that no man be sent thither against his will, yet notwithstanding, there is no sick person in all the city, that had not rather lie *there,* than at home in his own house."

HOME ECONOMICS

By ALICE P. NORTON

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(Continued from page 187)

III. THE FOOD PROBLEM.

A CANVASSING agent once called at my house to induce me to buy a certain cereal preparation. It was a wheat product, and according to the agent it possessed a very high food value. As he phrased it, it contained "forty per cent. nourishment," while oatmeal and other preparations, he assured us, were practically valueless, as they contained "nothing but starch."

It happened that I had recently been making some analyses of the cereal in question, and, somewhat unkindly, I am afraid, I began to question him as to what he meant by his "forty per cent. nourishment." His ideas were as vague as I expected, but his scorn of starch was unbounded and his laudation of the mysterious nourishment persistent.

He was a fair type of a large class of people to-day. In spite of the fact that there are even fewer common standards in regard to food than in other household affairs, and that individual likes and dislikes so largely control our eating, there has come to be a widespread interest in food problems, combined often with the densest ignorance as to the simplest principles involved. Food "fads" abound. Many absurd rules are laid down, and are followed by the woman who is honestly anxious to observe the laws of hygienic living, but whose ignorance of these laws is only matched by her credulity in following the dictates of an unknown authority.

It is strange what an influence a printed statement has upon almost